BEFORE

THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

Docket No. 2019-13-A

In re:	Application of Chem-Nuclear Systems,)	
	LLC, an EnergySolutions company, for)	
	Adjustment in the Levels of Allowable)	SECOND AMENDED
	Costs and for Identification of Allowable)	APPLICATION
	Costs)	(for Fiscal Year 2019-2020)
		_)	(101 1 Iscar 1 car 2017-2020)

Pursuant to the provisions of S.C. Code Ann. § 48-46-40(B)(4), et seq. (2008 & Supp. 2018), Chem-Nuclear Systems, LLC, an EnergySolutions company, ("Chem-Nuclear" or the "Company") submits this Second Amended Application for adjustment in the levels of certain "allowable costs" and for the identification of certain "allowable costs" for the operation of its regional low-level radioactive waste disposal facility located in the vicinity of Barnwell, South Carolina. In support of the relief, which it requests in this Second Amended Application, Chem-Nuclear would respectfully show unto this honorable Commission:

- 1. On June 6, 2000, the Governor of the State of South Carolina signed the Atlantic Interstate Low-Level Radioactive Waste Compact Implementation Act (the "Act"). The Act is codified as S.C. Code Ann. §§ 48-46-10, *et seq.* (2008 & Supp. 2018), as amended.
- 2. Section 48-46-40(B)(1) (Supp. 2018) of the Act authorizes and directs the Commission "to identify allowable costs for operating a regional low-level radioactive waste disposal facility in South Carolina." Section 48-46-30(1) (Supp. 2018) defines "allowable costs" as "costs to a disposal site operator of operating a regional disposal facility." Under that definition, such costs "are limited to costs determined by standard accounting practices and regulatory findings to be associated with facility operations."

- 3. Section 48-46-40(B)(3) (Supp. 2018) of the Act provides that "allowable costs" expressly include the costs of certain specifically identified activities necessary in the operation of a low-level radioactive waste disposal facility. That Section also provides that "allowable costs" include "any other costs directly associated with disposal operations determined by [the Commission] to be allowable."
- 4. Chem-Nuclear operates a regional low-level radioactive waste disposal facility in Barnwell County, South Carolina (the "Facility"). Consequently, the Commission has the authority to identify the "allowable costs" for the Company's operation of the Facility.
- 5. The Facility is located on a tract of land consisting of approximately 235 acres which the State of South Carolina owns and which the Company leases from the South Carolina Department of Administration. The 235-acre site includes areas for various operations, including completed disposal trenches, potential trench areas, ancillary facilities, water management areas and buffer zone areas.
- 6. The Company conducts its operations at the Facility under South Carolina Radioactive Material License 097 ("License 097") by which the South Carolina Department of Health and Environmental Control ("DHEC") has authorized receipt, storage and disposal of low-level radioactive waste at the Facility. License 097 contains numerous technical conditions and specifications for management of waste at the Facility. In addition to the requirements of License 097, the Facility is subject to DHEC's regulations in 24A S.C. Code Reg. 61-63 (Rev. 2008). DHEC's regulations are compatible with the provisions of "Licensing Requirements for Land Disposal of Radioactive Wastes," which the United States Nuclear Regulatory Commission ("NRC") originally promulgated in 10 C.F.R. Part 61, and DHEC has adopted most of those provisions and enforces them through its own regulations under an agreement with the NRC.

- 7. On June 7, 2019, the Commission issued its Order No. 2019-422 in Docket No. 2018-13-A. In that Order, the Commission identified certain categories of "allowable costs" and identified levels of "allowable costs" within those categories. Order No. 2019-422 approved certain rates for variable allowable costs and identified the sum of \$3,384,566 for total fixed allowable costs for the 12 months ending June 30, 2019. The Order also approved irregular costs of \$132,474 as allowable costs.
- 8. S.C. Code Ann. § 48-46-40(B)(4) (Supp. 2018) provides that an operator of a low-level radioactive waste disposal site may apply for adjustments in the levels of "allowable costs" that the Commission has identified for the previous fiscal year and for identification of costs that the Commission has not previously identified as "allowable costs." Upon approval of such application, Section 48-46-40(B)(4) requires the Commission to authorize the site operator to adjust its "allowable costs" for the current fiscal year to compensate the site operator for revenues lost during the previous fiscal year.
- 9. For the purposes of this Second Amended Application and its Exhibits, the Company has used the cost categories that the Commission approved in Order No. 2004-349 in Docket No. 2000-366-A, which were based on the recommendations of the parties to the Collaborative Review of the Company's Operations and Efficiency Plan ("OEP").
- 10. During the Company's recently concluded Fiscal Year 2018-2019 (*i.e.*, the twelve months ending June 30, 2019), the Company's actual "allowable costs" in those categories that the Commission identified in Order No. 2019-422 for fixed costs were \$3,090,852, which were \$293,714 less than the amount of \$3,384,566 identified in Commission Order No. 2019-422. Therefore, the Company proposes no adjustment for allowable fixed costs in this Second Amended Application.
- 11. With respect to the allowable costs that Order No. 2019-422 characterized as variable labor and non-labor costs, which are dependent upon volumes of waste buried, the

Company incurred actual costs in the category of variable labor and non-labor costs in Fiscal Year 2018-2019 of \$268,358, which is \$24,280 less than the total calculated costs of \$292,639 identified in Order No. 2019-422. The calculated costs are derived by multiplying the variable cost rates identified by the Commission in that Order for categories of waste by the number of units in each category. The Company proposes no adjustment for variable labor and non-labor costs in this Second Amended Application.

- 12. With respect to vault costs, Order No. 2019-422 established certain variable cost rates for each type of waste disposed at the Facility. By applying those rates to the volumes of each type of waste received in Fiscal Year 2018-2019, the Company calculated a total cost for routine disposal vaults of \$414,835. The actual incurred total cost for routine disposal vaults was \$417,495, which is \$2,660 more than the calculated costs. Therefore, the Company proposes an adjustment of \$2,660 in this category of costs.
- 13. With respect to those allowable costs, which Order No. 2019-422 characterized as irregular costs, the Company incurred total irregular costs for Fiscal Year 2018-2019 of \$156,007. Total irregular costs incurred in Fiscal Year 2018-2019 are \$23,533 more than the costs identified in Order No. 2019-422 of \$132,474. Therefore, the Company requests an adjustment for irregular costs of \$23,533 in this Second Amended Application.
- 14. The Company has attached to this Second Amended Application three (3) exhibits pertaining to the adjustments and identification of the categories of "allowable costs" for its disposal operations.
- 15. **Second Amended Exhibit A** to this Application describes in detail the Company's proposed adjustments for the recovery of its actually incurred costs for fixed, variable and irregular costs to reflect the differences between the level of "allowable costs" identified in Order No. 2019-422 and the level of the Company's actually incurred costs in Fiscal Year 2018-2019. Second

Amended Exhibit A also provides the rates for variable costs, which were contained in Order No. 2019-422.

- 16. **Exhibit B** describes the actual irregular costs, which the Company incurred in Fiscal Year 2018-2019, organized by project number.
- 17. **Amended Exhibit C** depicts the total fixed costs, irregular costs and variable cost rates that the Company proposes for identification and approval for Fiscal Year 2019-2020.
- 18. For Fiscal Year 2019-2020, the Company requests identification as "allowable costs" a total of \$3,145,096 as allowable fixed costs, as depicted in Amended Exhibit C. Amended Exhibit C also identifies variable material cost rates, and variable waste dependent labor and non-labor rates for Fiscal Year 2019-2020. Irregular costs for Fiscal Year 2019-2020 anticipated at the time of this Second Amended Application are \$1,256,031, as specified in Amended Exhibit C. The irregular costs will be discussed in detail in pre-filed testimony. The costs and amounts in Second Amended Exhibit A and Amended Exhibit C are consistent with the description of "allowable costs" in Section 48-46-40(B)(3) (Supp. 2018), and they have been determined by standard accounting practices, and are consistent with the recommendations of the Collaborative Review of the OEP as the Commission approved in Order No. 2004-349 in Docket No. 2000-366-A.

WHEREFORE, Chem-Nuclear Systems, LLC, an Energy *Solutions* company, respectfully prays unto this honorable Commission:

1. To review the Company's Second Amended Application and issue its Order, under S.C. Code Ann. § 48-46-40(B)(4) (Supp. 2008), recognizing the levels of "allowable costs" as depicted in Second Amended Exhibit A for Fiscal Year 2018-2019, and identifying the levels of irregular costs in Exhibit B for Fiscal Year 2018-2019, and identifying as "allowable costs" those

costs depicted in Amended Exhibit C for Fiscal Year 2019-2020.

2. For such other and further relief as is just and proper.

Respectfully submitted,

s/ J. David Black

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March 9, 2020

Columbia, South Carolina

SECOND AMENDED EXHIBIT A

FISCAL YEAR 2018-2019

FIXED COSTS

NO ADJUSTMENT PROPOSED

Fixed costs, subject to a 29% operating margin, were incurred in fiscal year 2018-2019 in the general categories of labor-related costs, non-labor costs, costs allocated from corporate functions, equipment leases and support, depreciation and insurance. The following table compares the actual costs incurred to the costs identified as allowable in Commission Order No. 2019-422:

	Commission Order No. 2019-422	Actual Costs Incurred in FY 2018-19	Adjustment Proposed
Labor, Fringe and Non-labor	\$2,033,811	\$1,912,214	
Depreciation	\$132,164	\$134,780	
Insurance	\$309,185	\$311,154	
Equipment leases and support	\$114,406	\$108,639	
Corporate Allocation (G&A)	\$795,000	\$619,696	
Subtotal (Fixed Cost subject to 29% margin)	\$3,384,566	\$3,086,483	
Legal Support	\$0	\$4,369	
Subtotal (Fixed Cost not subject to 29% margin)	\$0	\$4,369	
Total Fixed Costs	\$3,384,566	\$3,090,852	(\$293,714)

The actual Fixed Costs incurred during fiscal year 2018-2019 were \$3,090,852. This amount is \$293,714 less than the amount identified in Commission Order Number 2019-422; therefore, no adjustment is proposed in this category of costs.

FISCAL YEAR 2018-2019

VARIABLE COSTS

Variable Labor and Non-Labor Costs

NO ADJUSTMENT PROPOSED

Commission Order No. 2019-422 identified the following categories of rates for projecting Variable Labor and Non-Labor costs: vault purchase and inspection (per vault), ABC waste disposal (per shipment), slit trench operations (per slit trench offload), customer assistance (per shipment), and trench records (per container).

The following table illustrates the Variable Labor and Non-Labor costs that would be calculated using the Variable Labor and Non-Labor rates identified in Commission Order No. 2019-422 and the FY 2018-2019 actual number of units in each category.

	Units	Variable Cost Rate in Commission Order No. 2019-422	Calculated Cost
Vault Purchase & Inspection			
(per vault)	59	\$166.85	\$9,844.15
ABC Waste Disposal (per shipment) *total shipments, less slit trench shipments, less irregular			
project shipments	58	\$2,556.56	\$148,280.48
Slit Trench Operations			
(per slit trench offload)	3	\$37,425.65	\$112,276.95
Customer Assistance			
(per shipment)	61	\$63.05	\$3,846.05
Trench records			
(per container)	91	\$202.10	\$18,391.10
Total Calculated Variable Labor and Non-labor Cost			
			\$292,638.73

The actual Variable Labor and Non-Labor costs incurred in fiscal year 2018-2019 were \$268,358. This amount is \$24,280 less than the amount that would have been anticipated based on rates provided in Commission Order 2019-422; therefore, no adjustment is proposed in this category of costs.

FISCAL YEAR 2018-2019

VARIABLE COSTS

Vault Costs

ADJUSTMENT PROPOSED

The following table illustrates the Vault Costs that would be calculated using the Variable Cost rates identified in Commission Order No. 2019-422 and the actual FY 2018-2019 volumes of waste received in each respective category.

	Volume Received ft ³	Variable Cost Rate in Order No. 2019-422	Calculated Cost
Class A waste	8247.08	\$37.24	\$307,121.26
Class B waste	933.90	\$50.66	\$47,311.37
Class C waste	506.70	\$50.11	\$25,390.74
Slit Trench waste	168.00	\$208.40	\$35,011.20
Irregular Components (in vaults as an irregular cost)	0	N/A	N/A
Irregular Components (not in vaults)	0	N/A	N/A
Total Calculated Vault Cost			\$414,834.57
Total Volume (cubic feet)	9,855.68		

The actual Vault cost incurred during fiscal year 2018-2019 was \$417,495. This amount is \$2,660 more than the amount that would have been anticipated based on rates provided in Commission Order 2019-422; therefore, an adjustment of \$2,660 is proposed in this category of costs.

FISCAL YEAR 2018-2019

IRREGULAR COSTS

ADJUSTMENT PROPOSED

The following table summarizes the Irregular Costs incurred in fiscal year 2018-2019 organized by projects. Exhibit B provides additional descriptions of each of these irregular projects.

Irregular Cost Item	Order No. 2019-422	Actual FY '18-'19 Labor	Actual FY '18-'19 Non-Labor	Total Cost FY '18-'19
Trenches (Design, Construct, Backfill)	\$50,000	\$33,159	\$48,401	\$81,560
License Renewal and Appeal costs	\$0	\$2,618	\$0	\$2,618
Trench Records Software	\$15,000	\$11,554	\$0	\$11,554
Site Eng & Drawing Updates	\$5,000	\$0	\$0	\$0
Site Maintenance	\$600	\$561	\$0	\$561
Storm Damage Repairs & Cleanup	\$0	\$1,232	\$0	\$1,232
Operations Evaluation	\$60,000	\$0	\$58,496	\$58,496
Large Component Disposal	\$1,874	(\$13)	\$0	(\$13)
Total Irregular Costs	\$132,474	\$49,111	\$106,896	\$156,007.44

The actual Irregular Costs incurred in fiscal year 2018-2019 was \$156,007. This amount is \$23,533 more than the amount identified in Commission Order No. 2019-422; therefore, an adjustment of \$23,533 is proposed in this category of costs.

EXHIBIT B

FISCAL YEAR 2018-2019

IRREGULAR COSTS

ORGANIZED BY PROJECT

DDOJECT			
PROJECT NUMBERS	PROJECT NAME AND EXPLANATIONS		
	Trenches (Design, Construct, Backfill)		
188701.8028 188701.8029	(Labor \$33,159 and Non-Labor \$48,401)		
188701.8031	Transh construction activities in EV 2019 2010 including design		
188701.8032	Trench construction activities in FY 2018-2019 including design, construction and backfill in Trenches 99, 100 and Slit Trench 38.		
	License Renewal and Appeal Costs		
952188.8002	(Labor \$2,618.00)		
	Costs related to license appeal.		
	Trench Records Software		
188000.8013	(Labor \$11,554.00)		
100000.0013	Cost provides the maintenance and support for trench records database and reporting software.		
	Site Eng & Drawing Updates		
188007.8001	(Labor \$0.00)		
	Costs related to updates needed for site drawings.		
	Site Maintenance		
188004.8002	(Labor \$561)		
	Site maintenance costs.		
	Storm Damage Repairs & Cleanup		
100004 0003	(Labor \$1,232)		
188004.8003	Labor charged to this project in error. The expenses will be reclassed to the correct project in FY '19 -'20.		
	Operations Evaluation (BDF Ops Cost Study)		
188004.8004	(Non-Labor \$58,496)		
	Costs related to the Barnwell Disposal Facility Operations Cost Study.		
	Large Component Disposal		
	(Labor \$-12.79)		
188007.8001	Cost related to disposal of large component including design and construction of Trench 91 for large component disposal. The above cost is the result of a fringe true up from a prior period.		

AMENDED EXHIBIT C

PROPOSED FISCAL YEAR 2019-2020 COSTS

We propose the following amounts be identified as allowable costs for fiscal year 2019-2020:

FIXED COSTS	
Fixed Costs to which 29% operating margin is added	
Labor, Fringe and Non-Labor	\$1,975,000
Depreciation	\$136,000
Insurance	\$319,853
Equipment Leases and Support	\$83,228
Corporate Allocations (SG&A, IT)	\$631,015
Fixed Costs to which 29% operating margin is not added	·
Legal Support	\$0
Total Fixed Costs	\$3,145,096
IRREGULAR COSTS	·
Trench Characterization & Construction	\$600,000
License Appeal	\$21
Large Component Disposal	\$656,798
Site Maintenance	\$0
Storm Damage Repairs & Cleanup	(\$1,232)
Trench Records Software	\$444
Total Irregular Costs	\$1,256,031
VARIABLE COSTS	•
Variable Labor and Non-Labor Rates	
Vault Purchase and Inspection (per vault)	\$187.07
ABC Waste Disposal (per shipment)	\$1,589.54
Slit Trench Operations (per slit trench offload)	\$44,844.35
Customer Assistance (per shipment)	\$131.43
Trench Records (per container)	\$315.67
Variable Material Cost Rates (Vaults)	•
Class A Waste (per cubic foot)	\$38.28
Class B Waste (per cubic foot)	\$57.52
Class C Waste (per cubic foot)	\$53.00
Slit Trench Waste (per cubic foot)	\$188.57